Announcement of research results and article

# " Proof of Goldbach's conjecture and the expression of prime numbers "

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## Abstract:

In 1742 Christian Goldbach German One of the math enthusiasts wrote a conjecture to Euler stating that "any number greater than 5 can be written as the sum of the first three numbers." Euler examined the matter and meanwhile to confirmation expressed the subject

in other words . Euler suggested that " Each even number can be written as the sum of two prime numbers " these suggestions has been named as the " weak and strong conjectures.

Despite of many years activities on this conjecture famous mathicians in numbers theory and mathematics, worked on this conjecture , but a clear result has not been provided so far. Great mathematiations such as: Euler, Gauss, Mersen, Mills, and Eratstein proposed formulas and solutions but no one could clearly or without contradictory proove this

conjecture.
Meanwhile, after progress in computer hardware many articles have been presented about prime numbers to proof the Goldbuch's conjecture over the years, which most of articles were numerically and by computer programs , somehow proved that Golbuch conjecture is correct. According to Gauss suggestion , prime numbers are unlimited, so, It does not mean that if you proved this conjecture , over millions or billions times , it does not mean that this conjecture will be valid for greater values. substantially, this kind of reasoning isnot rational in mathematic

science.
In this paper, we had an essential attitude to Goldbach's conjecture, to do this we cross checked this conjecture in two following methods:

- analytical metheod
- numerical methods.

The main cause of mathematicians failure in solving Goldbach conjecture , had one main reason. their problem was failures in formulating prime numbers , which has not been solved so far and remained intact. this formula problem in prime numbers has not

been solved,yet.
mathematicians could not be able to find a general formula to express all prime numbers without any exception or contradiction.
In this article, after years research, we have found the prime numbers relationship by "spinning" theory.

– After formulating the prime numbers, it seems has been proved that satisfy all prime numbers.
– By formula of prime numbers It has been easily shown all summation of two prime numbers are always an Even number, indeed Goldbuch Guess has been proved.
– By computer program in Python it

has been shown there is no contradiction in Goldbuch Guess and  it has been proved to numbers up to ten power to eight,  Golbuch conjecture is correct, and  sum of all twin prime numbers are Even . Necessary to say Golbach validity program in Python ( executed up to 10^9 )  and  even numbers python program ( executed to 20 million Even numbers )  have no limitation , their limitations just related to PC and cpu power in process , processing time and limitations in digits.

According to abovementioned limits no violation of Goldbach's guess was found.

– The question may be raised that there may be even numbers that are not the sum of the two prime numbers , for example one of this two numbers be prime and the another one may be odd ( not prime ). for proving this a python program has been written and shows all Even numbers are equal a pair of two prime numbers, program has been run from 2 up to 20,000,000 , It has been shown it contains different bunches of twin prime numbers are equal to Even numbers.

By this means we can certainly claim that all even numbers have pairs of prime numbers.

– This article is kind of proove and ending to Goldbach conjecture which has been worked around for many years by mathematic and numbers theory specialists.
In case the content of this article are approved by your esteemed experts, please let me know to send the whole article for further actions .

Regards
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